



## DEPARTMENT OF THE AIR FORCE

OFFICE OF THE CHIEF OF STAFF

WASHINGTON, DC

APR 9 1998

### MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Air Force Environment, Safety and Occupational Health Committee (ESOHC)  
Meeting Minutes

The AF ESOHC met Mar 19, 1998. Lt Gen Vesely and Mr. McCall co-chaired the meeting. Individuals attending from offices with required membership were as follows:

HQ USAF/RE	Col Koeppe	HQ USAF/SE	Col Bergman
HQ USAF/DP	Ms. Grese	HQ USAF/IL	Mr. Orr
SAF/AQR	Col Williams	HQ USAF/JA	Col Wilcox
HQ USAF/ILM	LtCol Seawell	HQ USAf/ILE	Brig Gen Sheehan
SAF/IG	Col Teller	SAF/FM	Lt Col Henderson
SAF/GC	Mr. Sheuerman	SAF/LL	Col Bolt
HQ USAF/SG	Col New	NGB/CF	LtCol Ng
HQ USAF/XOO	Col Pease	HQ USAF/XPP	Ms. MacMichael
AFBCA	Mr. Ierardi	SAF/IA	Maj Gen Horn

### Opening Remarks

Gen Vesely and Mr. McCall made brief opening remarks and introduced the three briefings.

### International Programs

Ms. Teresa Pohlman, the HQ USAF Environmental Division Chief, briefed the international environmental activities in 7 countries where the AF has Lead Agent responsibility and concluded her brief with a summary of the Overseas Environmental Baseline Guidance Document (OEBGD) review. She reported that in Russia, AF environmental activities had opened new doors and influenced the creation of a Department of Ecology with over 1400 new positions. The AF is working with the Army and the Panama transition team to develop a plan to address Balboa range cleanup. Gen Vesely asked if we were obligated to clear this range. She stated the AF anticipates the requirement will be to cleanup what is practicable; however this was an area still under discussion and range cleanup could be very expensive. There was some discussion as to the relationship of the OEBGD to Status of Forces Agreements and Standardized NATO Agreements. Mr Sheuerman clarified that the primary purpose of the OEBGD is to provide criteria and management practices to be used by DoD Environmental Executive Agents in determining Final Governing Standards (FGS). The OEBGD also establishes standards for environmental compliance at DoD installations in countries for which no FGS exists.

## **Integrated Environmental/Operational Analysis (Southwest)**

Dr Doug Ripley from HQ USAF/ILEV briefed a proposal for continued development of an analysis capability to ensure integration of environmental and operational requirements prior to decisions on operational activities. This AF-wide analysis capability would summarize and store information concerning the presence of various natural resources and be a tool to examine how those resources might be affected by existing or proposed operations. Gen Vesely asked if this capability would allow us to solve problems at ranges. Mr Ripley explained that it would, because it could show training routes and compare them to, e.g., the Northern Aplomado Falcon, a federally listed endangered species, nesting areas. Col Pease stated that two years ago, Gen Jumper asked XOOR to analyze requirements so that we could answer, e.g., what range training capacity we had for an F- 16, Block 40 LANTIRN training requirement. Gen Vesely asked if this would streamline the Environmental Impact Statement (EIS) process. Col Pease said a primary reason for the delays in our present EIS process was that operators kept changing requirements and he believed that we could compress the process by working as a team and using this analysis capability. Dr Ripley stated that AF/ILEVP is chairing a Tiger Team to develop and use this analysis capability. The purpose of the team is to support the mission and to collaborate with other services and federal resource management agencies. Col Bolt stated that there was a lot of congressional interest on the “big picture” overall range requirements, indicating his support for the proposal.

Dr Ripley asked the committee to endorse the continued development of the management tool and the Tiger team. The committee stated that it would endorse the proposal and also directed that ILE and JAC staff a formal package clarifying the initiative and the purpose of the team.

## **Deicing**

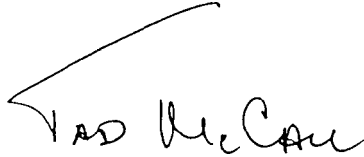
Maj John Coho from HQ USAF/ILEV briefed the AF deicing policy-development strategy, the status of the deicing team Charter actions, and recommendations for future actions. The AF is transitioning from urea to new airfield deicing chemicals such as potassium acetate in response to Clean Water Act Storm Water Regulations. The AF Deicing Stakeholder’s Working Group is managing the transition to maintain mission capability, minimize costs, and comply with regulations. Maj Coho stated the objective of the working group is to protect our aircraft from the possible corrosive effects of the new chemicals while taking full advantage of the environmental and operational benefits they offer. He stated the AF was in step with industry and that an informal poll of 22 airports showed that 17 were taking a similar approach. Gen Vesely asked whether deicing/anti-icing created operational limitations for certain aircraft like the B2. LtCol Forbes, AQRE, said that the B2 program manager may specify that there be an increased wash cycle when operating out of fields using the new chemicals. The general understanding of the ESOHC was that deicing/anti-icing with the new airfield chemicals may create a need for additional attention to aircraft cleaning and maintenance, but it does not necessarily create new operational limitations.

Maj Coho recommended the committee endorse the deicing policy-development strategy and receive an additional briefing in June 98 at which time Best Management Practices will be final and ready for the committee’s approval. The committee concurred with the recommendations.

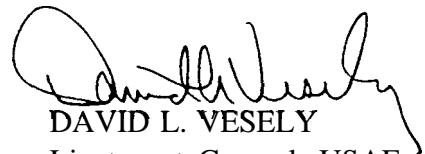
## Closing Remarks

Gen Vesely brought to the committee's attention that we had received two memos from MAJCOMs concerning the change from an Environmental Protection Committee to an Environment, Safety, and Occupational Health Committee. The committee expressed an interest in receiving feedback from other MAJCOMs.

Mr McCall suggested that the Explosive Waiver and Exemption Process subject be included in the next meeting's agenda. Gen Vesely agreed and said not to wait, but to schedule the meeting as needed to support staffing of this issue.



THOMAS W. L. MCCALL, JR.  
Deputy Assistant Secretary  
of the Air Force  
(Environment, Safety and  
Occupational Health)



DAVID L. VESELY  
Lieutenant General, USAF  
Assistant Vice Chief of Staff

Attachment:  
Briefing Charts

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HQ AFIA/MIE  
HQ AFMC/CV/CE/JA/LG/SE/SG/DP  
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<sup>1</sup> Distribution and courtesy copies will be made electronically beginning with the Dec 1997 minutes. Please contact LtCol Garland, garlandj@af.pentagon.mil, DSN 227- 10 19, if you experience difficulties receiving the minutes.



# DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE MATERIEL COMMAND  
WRIGHT-PATTERSON AIR FORCE BASE OHIO

03 FEB 1998

## MEMORANDUM FOR SAF/MIQ

03 FEB 1998

FROM: AFMC/CV

4375 Childlaw Road, Suite 1

Wright-Patterson AFB OH 45433-5001

SUBJECT: HQ USAF Environment, Safety and Occupational Health Committee (ESOH-C)

References: (a) SAF/MIQ e-mail 16 Jan 98, HQ EPC Change to Environment, Safety and Health Committee and Minutes

(b) USAF/CVA and SAF/MIQ Memo 7 Jan 98, MAJCOM Change from Environmental Protection Committee (EPC) to Environment Safety, and Occupational Health Committee

HQ AFMC will transition from an EPC to an ESOH-C structure. While We will transition to this new structure, costs for each of the areas will continue to be worked through the appropriate AFMC "business areas." We will also authorize, but not direct, our installations to make the same change. For your information, HQ AFMC was already addressing the safety and occupational health aspects of environmental issues in an existing integrated product team and Tinker AFB and Brooks AFB have already adopted the ESOH approach.

STEWART E. CRANSTON

Lieutenant General, USAF

Vice Commander



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR COMBAT COMMAND  
LANGLEY AIR FORCE BASE, VIRGINIA

OFFICE OF THE COMMANDER  
205 DODD BOULEVARD SUITE 207  
LANGLEY AFB VA 23665-2788

117 FEB 1998

MEMORANDUM FOR HQ USAF/CVA

SUBJECT: MAJCOM Change from Environmental Protection Committee (EPC) to Environmental Safety and Occupational Health Committee (Your Memo, 7 Jan 98)

1. Thank you for the opportunity to explore forming an Environment, Safety and Occupational Health Committee (ESOHC) at Headquarters Air Combat Command. We support the formation of an ESOHC at the AF and SAF level. However, we believe the operational oversight and execution of MAJCOM and installation ESOH programs require more focused management.
2. To combine these functions for vertical alignment with SAF/MIQ and the AF ESOHC will adversely impact the quality of all three programs and potentially increase our cost of doing business. Safety, occupational health, and environmental program management are sufficiently unique and complex in process and funding to warrant focused program oversight. We do not plan to incorporate ESOH at this headquarters.

BRETT M. DULA  
Lieutenant General, USAF  
Vice Commander

cc:  
SAF/MI  
ALMAJCOM/CV

*Global Power For America*

98 MAR -5 AM 9:51  
SAF/MI

IN

# **Air Force Environment, Safety, Occupational Health (ESOH) Committee**



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**19 Mar 98**

## **Agenda**

- . International Environmental**
- . integrated Environmental/Op  
(Southwest)**
- . Deicing**

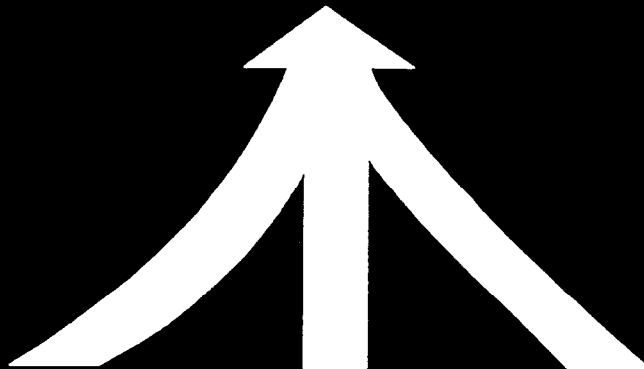
# **Air Force Environment, Safety, Occupational Health (ESOH) Committee**



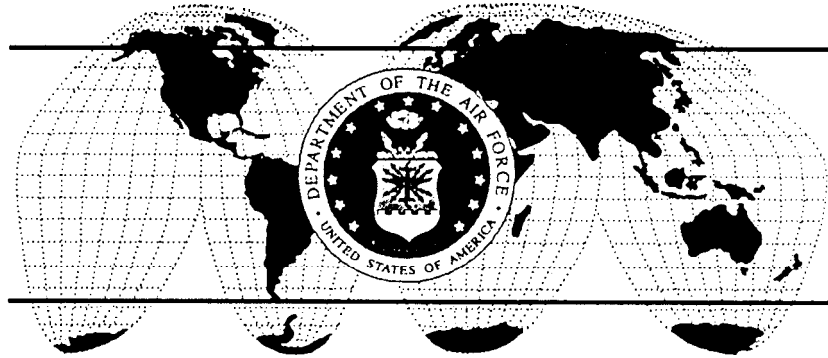
**19 Mar 98**

## **Agenda**

- **International Environmental Program Update**
- **Integrated Environmental/Operational Analysis  
(Southwest)**
- **Delcing**



## **International Environmental Program Update**



**Ms. Teresa Pohlman**  
**Chief, Environmental Division**



## Program Foundation

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*"There is a great benefit when militaries of the world do their part to protect and preserve their environments. There is a greater benefit when they do this by working together. Not only are we making the world a cleaner and safer place; we are also bridging old chasms and building new security relationships based on trust, cooperation and warmth. That makes the world a more peaceful place."*

**William J. Perry**  
**Secretary of Defense**

November 20, 1996



## Overview

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- Areas of Responsibility
- Current initiatives
- International Partners
- Future Actions



## **Areas of Responsibility and Current Initiatives**

- US DoD/ Russian Federation MOD Bilateral
- US DoD/ Royal Norway MOD Bilateral
- Arctic Military Environmental Cooperation (AMEC)
- Italian Defense Ministry
  - Panama Range Tiger Team
- Kazakhstan, Uzbekistan, Belarus & Ukraine
- Poland
- Possible Contact with Argentina
- Overseas Environmental Baseline Guidance Document (OEBGD)



## **US DoD - Russian MOD Bilateral**

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- **Environmental Bilateral Agreement Signed Jun 95**
  - **Covers Broad Environmental Information Exchange and Cooperation Areas**
  - **5 Meetings: 1 in 96, 3 in 97, and 1 in 98**
- **Draft Program Management Plan (PMP) is Complete**
- **Russians Attended Pollution Prevention (P2) Conference in San Antonio**



## **US - Russian MOD Future Actions**

- DUSD (I&CP) Currently Working Master Data Exchange Agreement--Must Have
- Continue Information Exchange Projects Supporting Bilateral
- Co-Host International Environmental Conference--Spring 1999 in Russia
- USAFA and AFIT Co-Developing Environmental Awareness Course - Sep 98



## **US DoD - Norway MOD Bilateral**

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- **Environmental Bilateral Agreement Signed May 94**
  - 2 Meetings: 1 in 96, 1 in 97, 1 Planned for 98
  - Draft PMP is 50 Percent Complete
- **5 Ongoing Projects**
- **Call for New Projects - Jan 98**
  - Aggressive Response - 26 Candidate Projects



## **US - Norway Future Actions**

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- **Principals Meeting Planned for Jun 98**
  - **Present Draft PMP**
  - **Review Current Projects and Status**
  - **Approve New Projects**



## **Arctic Military Environmental Cooperation (AMEC)**

- **Tri-Lateral Agreement: US - Russia - Norway**
- **Environmental Agreement Signed in Oct 96**
  - **7 Meetings: 1 in 97, 4 in 97, and 2 Planned for 98**
- **Only Agreement with Funding Stream**
  - **Environmental Security Technology Certification Program**
    - 7 Active Projects - \$1.2M in FY96 Funds
- a **Limited Future AF Role - Executive Agent  
Responsibility Passed to Navy**



## Italian Defense Ministry

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- ILE Delegation Visited Italian MOD in Sep 97
- Mr. Vest Visited 6 Feb 98
- Italian Primary Environmental Interest
  - Education and Training
  - Technology Exchange
- Italian Delegation Planned Visit to the Pentagon, AFIT, and AFCEE - Apr 98



## Panama Range Tiger Team

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### ■ ILEV Co-Chairs Range Tiger Team

#### ■ Purpose:

To standardize Air Force and Army Range Initiatives for the Panama Canal Treaty Implementation Agency (PC-TIPA)



## **Panama Range Tiger Team (cont)**

- **Players**
  - **PC-TIPA**
    - **Army**
      - **Southern Command (USARSO)**
      - **Army Engineering Center**
      - **HQ USA**
    - **Air Force**
      - **SAF: GCI, GCN, IAL, PAC**
      - **HQ USAF: ILE, JAC, XPP**
      - **HQ Air Combat Command CE**



## **Kazakhstan, Uzbekistan, Belarus, and Ukraine**

- **Contact Initiated Through SAF/IA Call Message**
  - **Nunn-Lugar Funding**
- **HQ AFMC/ IA Forwarded Call**
  - **Wright-Patterson and McClellan AFB Selected to Participate**
- **13 Environmental Exchange Visits Aug 95-Sep 97**
  - **Successful Military-to-Military Team Building**
- **No Future Actions Planned**



## **US DoD - Poland MOD & MOE**

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- **SAF/MIQ Is Lead**
  - **Goal: Assist Poland in Building a Robust Environmental Security Program**
- **Master Data Exchange Agreement Signed Jun 95**
- **Environment, Safety & Occupational Health training materials provided to Polish MOD & MOE**
- **Assisting in development of Environmental Management System guidelines for the Polish MOD**
- **Supervisory Board member for the Risk Abatement Center for Central & Eastern Europe in Katowice (support services for Polish MOD)**



## US DoD - Poland Future Actions

- Co-sponsor with the Swedish MOD of the Euro-Atlantic Partnership Council Workshop, 8-10 June 98 in Warsaw
- Sponsor of Warsaw 98 - international Symposium on Environmental Contamination in Central and Eastern Europe, 15-17 September 98
- Identifying Bioremediation opportunities at former Soviet Sites (1000) in Poland
- Developing database on US Environmental projects in Poland and surrounding countries



## Argentina

- **Mr. Vest Approached by Argentine Defense Officials on Bilateral Agreement**
  - **Western Hemisphere Environmental Conference in Miami, Jun 97**
- **Mr. Vest Visit -- Indefinitely Postponed**
  - **Future Bilateral Agreement ?**



## **Overseas Environmental Baseline Guidance Document (OEBGD)**

- **Current Document Date - Oct 92**
- **Review Initiated in Jun 97 Through DoDI 4715.5**
- **ILEVQ Is Lead and Chair of Review Committee**
- **Worldwide Experts Revising via Chapter Working Groups**
  - **DUSD(ES)/IA**
  - **Joint Staff (J4)**
  - **Defense Logistics Agency (DLA)**
  - **All Services - CONUS and Overseas**
- **Mar 98 Review Complete & DoD Staffing Start**



## Summary

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- Areas of Responsibility
- Current Initiatives
- international Partners
- Future Actions

# **Integrated Environmental/Operational Analysis (Southwest)**

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**Dr. Doug Ripley  
Environmental Planning Branch**



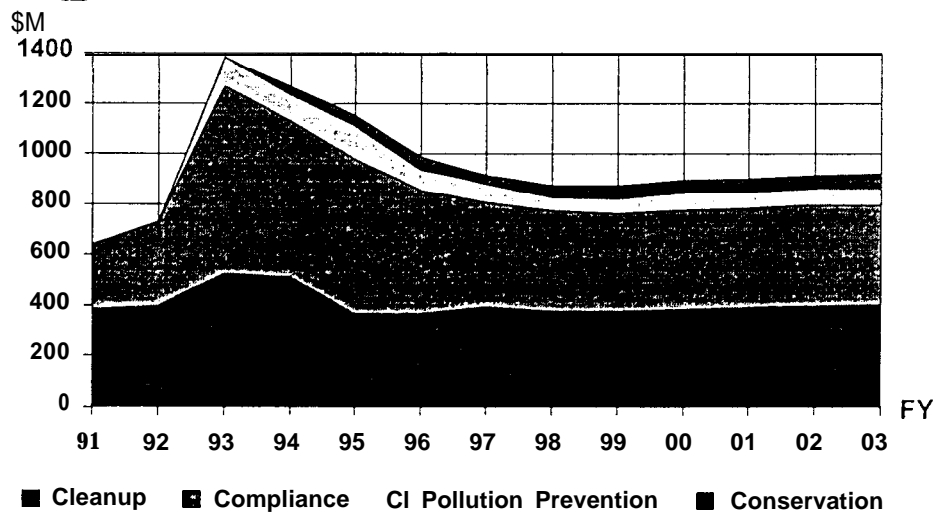
## **Overview**

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- **Funding Profile**
- **Conservation and Planning Program**
- **Integrated Environmental/Operational Analysis (Southwest)**
  - **Purpose**
  - **Objectives**
  - **Strategy**



## FY91-03 Environmental Funding



ESDH Cm. B-19 Mr. SB 24

FY99 PB

Maj. Pritchard/LEVA/2 1 Jan 99



## **USAF Conservation Program**

- Approximately 9 million acres of land
- Over 700,000 acres of commercial forest land
- Over 20,000 hunting and fishing permits sold annually
- At least 70 protected species
- Hiking, camping, and educational opportunities
- Over 60% of AF land available for public access
- Over 1,900 buildings or objects listed on the National Register of Historic Places



## **Integrated Environmental/Operational Analysis (Southwest)**

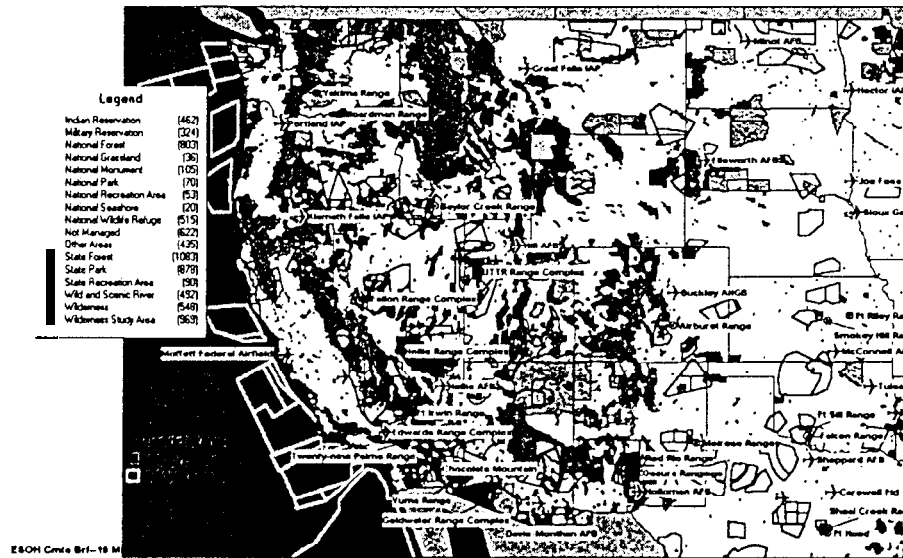
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### **Purpose**

- To continue support for the military mission and to ensure Air Force collaboration with the other services and federal resource management agencies, the Air Force is embarking upon development of a Integrated Environmental/Operational Analysis (Southwest).



## Integrated Environmental/Operational Analysis (Southwest)





Draft  
LEIS  
Nov 98

Draft  
LEIS  
Nov 98

Goldwater  
Range  
Renewal

**Nellis  
Range  
Renewal**

McGregor  
Range  
Renewal  
(Army)

Draft  
LEIS  
Nov 98

**SING's  
F-16**

Talon  
MOA  
EA

~~Draft~~  
EIS  
Dec 98

**RBTI  
Initiative**

FWS  
BOs

Claiborne  
Range

Holloman  
GAF  
Beddown

## Various QDR Actions

ANG  
Low  
Levels

## Complex Environmental and Operational Issues



## **Integrated Environmental/Operational Analysis (Southwest)**

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### **Objective**

- Provide early environmental support for operational activities

### **Why Important?**

- Meet legal requirements
- Define operations, training, and testing



## **Integrated Environmental/Operational Analysis (Southwest)**

### **Strategy**

- Environmental issues integral to decision making--early consideration key.
- Ensure proactive AF involvement
- Articulate unique requirements
- Posture AF to assume new roles and missions
- Integration of total force



## **integrated Environmental/Operational Analysis (Southwest)**

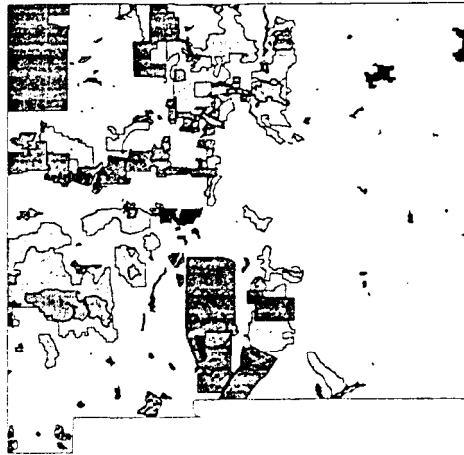
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### **Next Steps**

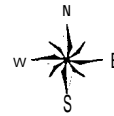
- Establish Tiger Team- completed - SAF/MIQ/GCN, AF/ILEV/XOOR/JACE, and HQ AFCEE
- Develop initial data base (near term)- completed
  - identify constraints and opportunities
  - identify interdependence of environmental and operational issues
  - Support senior level decision-making and fiscal advocacy
- Integrate computer data base - ECD 15 Sep 98
- Maintain data base



## NEW MEXICO MANAGED LANDS



- Managed Lands
- Indian Reservation
  - Military Reservation
  - National Forest
  - National Grassland
  - National Monument
  - National Park
  - National Recreation Area
  - National Wildlife Refuge
  - Not Managed
  - Other Areas
  - State Forest, Park or Recreation
  - Wild and Scenic River
  - Wilderness
  - Wilderness Study Area

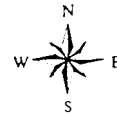




## NEW MEXICO VEGETATION COVER



- New Mexico Vegetation
- ALPINE TUNDRA
  - CHIRICAHUA DESERT SCRUB
  - CLOVERED BASH SCRUB
  - CONIFEROUS AND MIXED WOODLAND
  - DESERT GRASSLAND (ECOTONE)
  - GREAT BASH DESERT (SCRUB)
  - LUPINE SAVANNA (ECOTONE)
  - LAVA BEDS
  - MONTANE CONIFEROUS FOREST
  - MONTANE GRASSLAND
  - MONTANE SCRUB
  - PLAINS-MESA GRASSLAND
  - PLAINS-MESA SAND SCRUB
  - SAND DUNES
  - SUBALPINE CONIFEROUS FOREST
  - URBAN, FARMLAND OR OPEN WATER



ESOM Circle Brt-18 Mar 98 33

## **Update on Air Force Deicing/Anti-icing**

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**Major John Coho  
Environmental Quality Branch**



## Overview

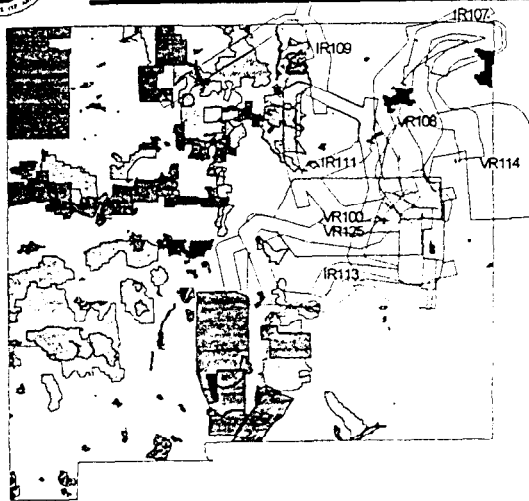
- **Background**
  - impacts of deicers
  - Air Force Strategy
- **Status of Charter Actions**
- **Recommendations**

ESOH Civil Brief-19 Mar 98 38

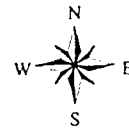
- Presenting this information as an update and to answer AF/CVA question on airfield deicing. To paraphrase, '...this isn't rocket science, why are we studying airfield deicing. ...'
- Bottom line: we want to take advantage of new technology to mitigate a projected cost increase, and improve performance and operational flexibility.
  - For largely environmental reasons, AF has initiated transition to new airfield deicing chemicals. Our neighbors to the north (Canadian AF) have a few years experience with these chemicals and are using new technology that offers opportunity to minimize cost increases and weapon system impacts, and improved operational flexibility.



## MANAGED LANDS AND MTRs



- Visual Route
- Management Route
- Managed Land
- Indian Reservation
- Military Reservation
- National Forest
- National Cemetery
- National Monument
- National Park
- National Recreation Area
- National Wildlife Refuge
- Not Managed
- Other Areas
- State Forest, Park or Recreation
- Wild and Scenic River
- Wilderness
- Wilderness Study Area



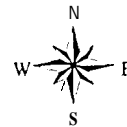
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## VEGETATION AND MTRs



- Visual Routes
- Infrastructure Routes
- Mountain Vegetation
- ALPINE TUNDRA
- CHRYSLER DESERT SCRUB
- CLOSED BASIN SCRUB
- CONIFEROUS AND MIXED WOODLAND
- DESERT GRASSLAND (ECOTONE)
- GREAT BASIN DESERT SCRUB
- JUNIPER SAVANNA (ECOTONE)
- LARK BIRDS
- MONTANE CONIFEROUS FOREST
- MONTANE GRASSLAND
- MONTANE SCRUB
- PLAINS GRASSLAND
- PLAINS WOODLAND
- SAND DUNES
- SERIAL CONIFEROUS FOREST
- URBAN, FARMLAND OR OPEN WATER



ESON Circa Brf-19 Mar 98 36



## **Recommendation**

- **ESOHC Endorse Integrated Environmental/Operational Analysis (Southwest)**



## Background: Impacts of Deicers

- Aircraft deicers (ethylene and propylene glycol)
  - Cause water pollution (deplete oxygen, kill fish)
  - No benign substitutes on the horizon
- Pavement deicers (urea, potassium acetate, sodium formate)
  - Urea more polluting than glycols
  - New, less harmful chemicals available (potassium acetate, sodium acetate/formate)
- Mission Impact: Water pollution restrictions and public concerns may restrict *winter flying operations*

ESOM Cmte Brf-18 Mar 98 48

There is a growing concern with the discharge of deicers into the waters of the US

Fish kills and odor complaints from local communities

At some of our overseas installations the use of certain deicers/anti-icers is forbidden. For example, in the Federal Republic of Germany, Urea was banned several years ago due to its impact on local waterways.



## Air Force Strategy

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- Integrated ESOH approach--AF Deicing/Anti-icing Stakeholders Group
- Members: ILE (lead), ILM, JA, XO, AQ, SG, SE, & MAJCOMs
- Charter:
  - Define requirements and establish baselines
  - Improve processes and streamline operations
  - Develop and issue guidance to field
  - Foster implementation of pollution prevention/best management practices (P2/BMPs)
  - Assess results & support facility improvements

ESOH Cmte Brl--18 Mar 98 41

-AF established the Deicing/Anti-icing Stakeholders Group in Jun 96

- Centers around Stakeholder's Group
- Reps from cross-functional as well as large & small aircraft reps from MAJCOMs

-Other participants supporting Stakeholders include: Army, Navy, FAA, Canadian AF

-The EPC Charter set the stage for a cross-functional effort to understand AF deicing requirements and take action to comply with CWA requirements

Last two charter items are by nature iterative, based on continual improvements/refinements in P2/BMPs.

BMP implementation as required in CWA is an Iterative process with an ultimate CWA-established goal of of zero discharge of pollutants into waters of the US

-Facility improvements are a last resort, after non-structural BMPs can no longer meet CWA requirements for "significant reduction" of deicing chemicals in runoff.

-At some overseas locations (primarily Germany and the UK), facility improvements are a requirement, as all run-off must be contained, monitored, and possibly treated before discharge.



## Status of Charter Actions

- ☐ Define requirements and establish baselines
  - ☐ MAJCOM data submitted 1st Quarter FY98
  - CI Data evaluation on-going
- ☐ Improve processes and streamline operations
  - ☒ Improved aircraft deicing/anti-icing general technical order published Jun 97 (TO 42C-1-2)
  - ☐ Airfield deicing test on-going
  - ☐ Materials compatibility tests on-going

ESOH Cmde Brl--19 Mar 98 42

- Last fall, we issued a data call to define AF deicing requirements and to establish baselines of chemical usage for use in documenting CWA compliance.

-- Initial data are in. Data included: chemical use, weather, operations and regulatory environment. We're evaluating data and filling data gaps. Once we have all needed data, installations will be rank-ordered based on their deicing needs.

- TO updated...

- Transition to Kac/NaF is happening. Since 1990, AF urea use has decreased by 74% (to 650 tons) and Kac use has gone from virtually zero to 350,000 gallons/year. New chemicals likely to bring cost increase - roughly 3-times the price of urea.

- New technology used in conjunction with new chemicals offers an opportunity to reduce anticipated cost increase and impacts to weapon systems by controlling/reducing chemical use while improving operational flexibility.

- WL testing is AF reponse to corrosion concerns brought up by PACAF (Elmendorf) and information from Europe, and various US commercial airport, eg., Lagueardia and JFK in NY recently returned to urea because of electrical problems in runway lighting attributed to Kac. Possible overapplication?



## Status Of Charter Actions (continued)

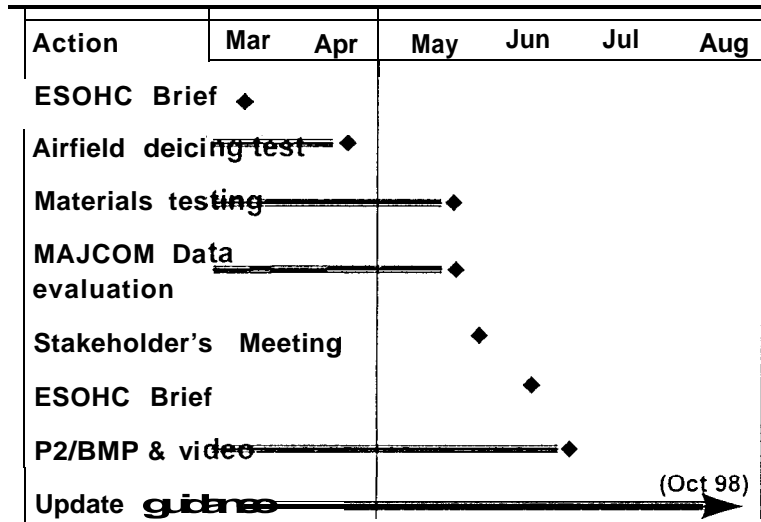
- ☐ Develop and issue guidance to field
  - ☒ Interim guidance on P2/BMPs published Dec 96
  - ☐ P2/BMPs and training video in final draft
  - ☐ AF guidance; Consolidated airfield deicing report
  - ☐ AFI 32-1045 update

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- Final staff-level comments are in on the interim P2/BMP guidance document. No major changes made; baseline is established; video will foster implementation of BMPs. We need to begin tracking impact on chemical usage at each installation.
- The Niagara and WL tests will wrap-up this spring. Our teammates at HSC have already begun pulling together literature and industry data to supplement the WL and Niagara test results for a consolidated report on airfield deicing using the new chemicals and new technology being evaluated at Niagara ARS.
  - As appropriate based on cross-functional evaluation of the consolidated report, the Stakeholder's group will recommend modifications to runway condition assessment and airfield deicing guidance.



## FY98 Timeline for Deicing Actions



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- Timeline for major deicing actions.



## Recommendations

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- AF/ILE brief ESOHC (Jun 98) on test results
- ESOHC endorse deicing strategy
  - P2/BMP implementation, improvement
  - Guidance revision
    - P2/BMPs and video
    - Airfield deicing process
  - Modernize airfield deicing - ILE initiative

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Jun 98 brief will present outcomes of various on-going tests and guidance development efforts. We'll present Stakeholders Group recommendations for future actions and modifications to AF guidance.